REMARKS

Applicants respectfully request reconsideration of the present application in view of the reasons that follow.

Status of the Claims

Claims 1-20 were previously pending, with claims 3 and 10-20 withdrawn. No claims are amended, added or canceled. Thus, claims 1-2 and 4-9 are currently pending and presented for reconsideration on their merits.

The Present Claims Are Not Anticipated Or Obvious

Claims 1-2 and 4-9 are rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Publication No. 2003/0096149 ("Koyama"). These claims are alternatively rejected under 35 U.S.C. § 103(a) over Koyama. Applicants respectfully traverse the rejections.

The present claims, as reflected in independent claim 1, are directed to direct methanol-type fuel cells ***comprising methanol*** and a polymer electrolyte comprising the polymer main chain having the oxygen element and/or sulfur element and the aromatic carbon ring, and the ion exchange group being directly bonded to a part or all of the aromatic carbon ring, wherein the ratio (R) of the number of the aromatic condensed cyclic carbon ring to the number of all of the aromatic carbon ring (number of aromatic condensed polycyclic carbon ring/number of all of the aromatic carbon ring) in the polymer electrolyte satisfies the formula below, $1 > R \geq 0.15$. Koyama fails to teach or suggested such fuel cells.

From the foregoing description of the claimed invention, it is clear that the fuel cells comprise methanol as a component. In contrast, Koyama's fuel cells do not. Although the Examiner cites paragraphs [0001] and [0003] of Koyama for allegedly teaching or suggesting a fuel cell comprising methanol, these sections fail to do either. Paragraph [0001] merely describes a solid polymer electrolyte membrane without reference to methanol. Paragraph [0003] recites "[i]n a reformed-gas fuel cell, an electromotive force is obtained by providing a pair of

electrodes on both sides, respectively, of a proton-conductive solid polymer electrolyte membrane, ***supplying hydrogen gas*** obtained by reforming a low-molecular weight hydrocarbon such as methane, methanol, or the like to one of the electrodes (a hydrogen electrode) as a fuel gas." (emphasis added.) From this description, it is clear that Koyama merely teaches a fuel cell containing only hydrogen gas as a fuel. Although such gas can be obtained by reforming methanol, as the paragraph indicates, the fuel cell does not include methanol itself, but uses the hydrogen gas by-product. Thus, Koyama fails to teach the present claims. Moreover, Koyama fails to provide the skilled artisan with any suggestion on modifying the teachings of the reference to include methanol in the fuel cell, particularly because paragraph [0003] implicates only hydrogen gas.

Koyama, therefore, fails to teach or suggest the present claims and accordingly do not anticipate the claims or render them obvious. Applicants respectfully request that the anticipation and obviousness rejections be withdrawn.

CONCLUSION

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date NOV 2 1 2011

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